

## ABSTRACT OF THE DISCLOSURE

A head substrate and a projection substrate of a head drum comprise a conductive material having a resistance of

$1 \times 10^{10} \Omega$  or less and are connected to a metal base so as to be at the ground potential via the metal base and a rotating drum. These antistatic treatments allow static electricity charged on a magnetic tape to be discharged to the head substrate and the protection substrate without flowing to a magneto-resistive (MR) element, thereby preventing the electrostatic discharge breakdown of the MR element.